

Jennifer M. Granholm, Governor

**THE MICHIGAN DEPARTMENT
OF ENVIRONMENTAL QUALITY**

Steven E. Chester, Director
<http://www.michigan.gov/deq>



and

THE MICHIGAN MUNICIPAL BOND AUTHORITY

Janet Hunter-Moore, Executive Director

Under the Authority of Part 54, Clean Water Assistance, of the Natural Resources
and Environmental Protection Act, 1994 PA 451 and the Shared Credit Ratings Act, 1985 PA 227

Present the

**FISCAL YEAR 2003 ANNUAL REPORT
of the MICHIGAN DRINKING WATER REVOLVING FUND**

Prepared by:
Revolving Loan and Operator Certification Section
Environmental Science and Services Division
PO Box 30457
Lansing, Michigan 48909-7957
517-373-2161

December 2003

Table of Contents

I.	Introduction	3
II.	Program Contacts	3
III.	Program Structure	4
IV.	Long-term Goals	4
V.	Short-term Goals	6
VI.	Establishment of Interest Rates	9
VII.	Advantages of the Drinking Water Revolving Fund	10
VIII.	Allocation of Funds	10
IX.	EPA Automated Clearinghouse Activities	11
X.	Assurances	11
XI.	Summary	11

Attachments

DWRF Funded Projects by Applicant	Attachment 1
Category Costs Dollars	Attachment 2

I. INTRODUCTION

On August 2, 1996, the United States Congress passed the Safe Drinking Water Act (SDWA) amendments of 1996 (P.L. 104-182). This legislation authorized the creation of a revolving fund to provide low-interest loans to qualified water suppliers for repairs or enhancements to public water supply systems. In theory, this fund would be very similar to the State Revolving Fund (SRF) created to assist water pollution control projects.

Michigan responded to the new federal program by creating the Drinking Water Revolving Fund (DWRF). As with the SRF, the DWRF is co-administered by the Michigan Department of Environmental Quality (MDEQ) and the Michigan Municipal Bond Authority (MMBA). The MDEQ handles all programmatic issues, while the MMBA serves the program with its financial expertise.

While there are many similarities between the SRF and the DWRF, there are some notable differences. For instance, the SRF is permitted to fund only municipalities, while the DWRF may include privately owned community water suppliers and not for profit noncommunity water suppliers. The SRF has very limited set-aside funds, whereas the DWRF makes liberal use of special set-asides to fund administration, capacity development, source water protection, source water assessments, etc. The loan repayment period in the SRF is limited to 20-years, while the DWRF can extend up to 30-years for communities that qualify as "disadvantaged."

II. PROGRAM CONTACTS

For financial issues dealing with the bonding structure, bond documents, financial detail and audit results, contact:

Ms. Janet Hunter-Moore, Executive Director
Michigan Municipal Bond Authority
Treasury Building
Lansing, Michigan 48922
517-373-1728
www.moorejh@michigan.gov

For technical reviews of DWRF projects, permit issuance, and administration of the set-aside programs authorized by the SDWA, contact:

Mr. James Cleland, Assistant Chief
Water Division (WD)
P.O. Box 30630
Lansing, Michigan 48909-8130
517-241-1287
www.clelandj@michigan.gov

For program oversight, grant administration, and project management issues, contact:

Mr. Chip Heckathorn, Chief
Revolving Loan and Operator Certification Section (RLOCS)
Environmental Science and Services Division
P.O. Box 30457
Lansing, Michigan 48909-7957
517-373-2161
www.heckathc@michigan.gov

III. PROGRAM STRUCTURE

Michigan operates the DWRF within a financing structure similar to that of the SRF. We offer loans to qualified applicants who possess at least investment grade credit. Investment grade credit may be demonstrated by a separate credit rating or a credit assessment letter from one of the rating agencies, by a pledge of state revenue sharing with sufficient coverage, or by credit enhancement. Michigan law allows for a county or a public authority to issue debt on behalf of underlying communities. The investment grade credit must be approved by the MMBA for the entity issuing the debt. For water suppliers who are municipalities with granted bonding authority, this presents no significant challenges.

The DWRF sells tax-exempt revenue bonds to provide money that is used to reimburse communities for incurred costs. The most recent bond issue occurred in August 2002. Both the DWRF and the SRF 2002 Revenue Bonds received the highest ratings from Fitch (AAA), Moody's Investor Services (Aaa), and Standard and Poor's (AAA). These ratings demonstrate a high level of confidence in the structure and administration of Michigan's infrastructure programs. As the DWRF reimburses suppliers, federal funds from the capitalization grant and state funds from the grant match are transferred into a debt service reserve account to provide coverage for the leveraged bond issue.

IV. LONG-TERM GOALS

Michigan's DWRF established a new funding source designed to protect and preserve public health within the state's boundaries. Michigan's geographical identity as a Great Lakes state affords its citizens with an abundant and high quality water resource from which to draw its drinking water. Unlike many states, Michigan water supplies are plentiful and periods of restricted use are few and far between in most communities. Given our abundant water resource, the challenge for water suppliers lies in protecting the high quality of the resource as well as ensuring that adequate volume and pressure exist to deliver potable water to the customer.

In light of the interest in protecting public health, the MDEQ and the MMBA have undertaken efforts toward the attainment of Michigan's long-term goals as stated in the Intended Use Plan (IUP):

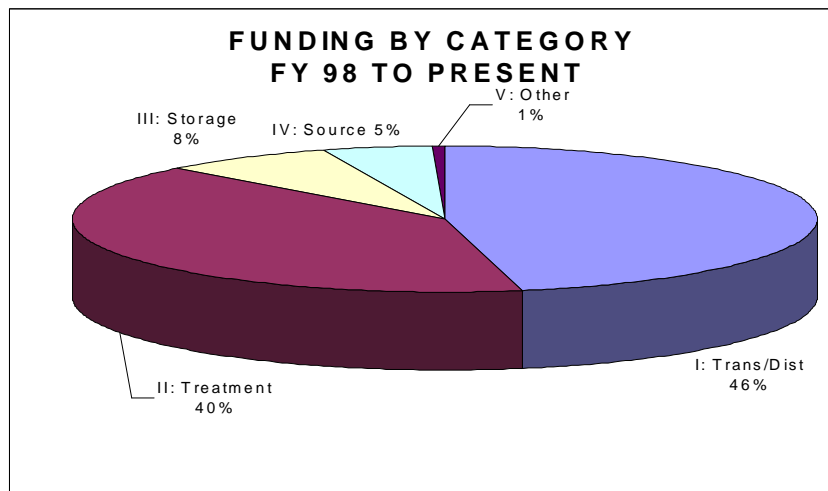
1. *To maintain statewide compliance with all applicable state and federal drinking water laws, rules and standards.*
2. *To protect the public health and environmental quality of our state.*
3. *To implement Source Water Assessment, Source Water Protection and Wellhead Protection Programs.*
4. *To develop strategies within the DWRF to assist smaller, economically disadvantaged communities in meeting drinking water standards.*
5. *To promote the DWRF as a viable tool for use by Michigan water suppliers in financing their waterworks system improvements or upgrades.*
6. *To secure Michigan's full share of federal funding and to expeditiously obligate these funds, along with the state contributions, for the construction of eligible facilities which meet state and federal requirements.*

7. *To develop effective partnerships with other federal and state financing sources to promote efficiency in environmental review procedures and coordination of funding.*
8. *To apply a Capacity Assessment Program for all new community and non-transient noncommunity water supplies; and to apply a Capacity Development Strategy to selected existing systems.*
9. *To implement new operator certification program requirements to assure proper operation and maintenance of public water systems.*

Michigan is proud of its accomplishments in promoting compliance with all applicable drinking water requirements. Prior to the creation of the DWRF, project financing for community water supply was left largely to local units of government or to individuals investing in their own systems. The DWRF provides a source of infrastructure financing which assists communities in protecting both public health and well being. In Fiscal Year (FY) 2003, 22 loans were made totaling \$73,285,000. This brings the DWRF to a total assistance of \$270,400,000 for 99 water supply projects since 1997 (see Attachment 1 – DWRF Funded Projects by Applicant).

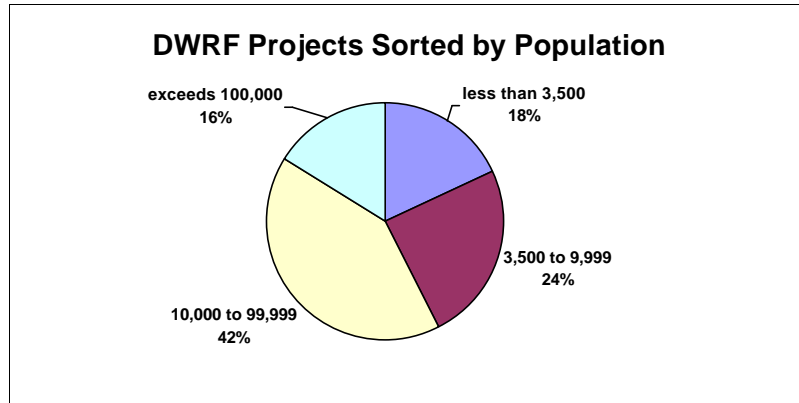
The following provides the cost breakdown by project category of all projects funded to date. Attachment 2 (Category Costs Dollars) is a complete listing of all the projects.

I. Transmission/Distribution	\$126,162,289
II. Treatment	\$109,482,313
III. Storage	\$ 20,548,073
IV. Source	\$ 12,702,592
V. Other	\$ 1,504,733
TOTAL	\$270,400,000



The DWRF funds projects of varying population size. The following shows the dollar amount of projects funded by population size since the inception of the program.

Population less than 3,500	\$ 49,690,000
3,500 to 9,999	\$ 65,615,000
10,000 to 99,999	\$111,180,000
over 100,000	\$ <u>43,915,000</u>
Total	\$ 270,400,000



V. SHORT-TERM GOALS

In order to accomplish the long-term goals, we focused on more immediate objectives. Our short-term goals in FY2003 were:

A. *To continue our outreach effort to publicize the DWRF through direct mail, electronic media, newsletter publication, workshops, and meetings.*

Our outreach efforts have been very successful. Program managers continue to meet with interested public water suppliers, consulting engineers, and associations with an interest in water supply issues. In addition, substantial program information is available through the internet on the MDEQ's web site.

B. *To continue implementation plans for source water protection focused on statewide surface water assessments and groundwater assessments in areas tributary to the Great Lakes.*

The 1996 amendments to the federal SDWA required states to submit source water assessment programs (SWAP) by February 6, 1999, for Environmental Protection Agency (EPA) approval. Michigan's SWAP was submitted on time and approved by the EPA in October 1999. The SWAP Advisory Committee has met 13 times since 1997 to develop the SWAP and assist with technical and public involvement issues.

The intent of the SWAP is to identify the areas that supply public drinking water; inventory contaminants and assess water supply susceptibility to contamination; and inform the public of the results. Michigan has almost 12,000 community and noncommunity public water supplies with an estimated 18,000 sources to assess by

December 2003. To date, 8,200 noncommunity, 60 surface water, and 636 community groundwater source water assessments are underway.

In 1997, the state of Michigan reserved the maximum allowable, one-time 10 percent set-aside for SWAP of \$5,968,110 from the initial federal capitalization of the DWRP. There were no SWAP expenditures in FY1997, but expenditures of \$372,879 in FY1998, \$1.4 million in FY1999, \$1.1 million in FY2000, \$825,000 in FY2001 and \$1.2 million in FY2002. An updated SWAP Workplan/Budget was submitted to the EPA in October 2001 and approved on December 6, 2001, to allow full expenditure of the initial SWAP set-aside through May 2003. EPA has accepted further extension of the Michigan SWAP through December 2003. With EPA concurrence, the remaining dollars of the SWAP set-aside were transferred to the Wellhead Protection set-aside.

Major SWAP expenditures in FY2003 included continuing noncommunity assessment contracts with Michigan State University Institute of Water Research and the local health departments. Joint Funding Agreements were continued through May 2003 with the U.S. Geological Survey to develop the connecting channels flow model in Southeast Michigan and assist with surface water and karst source water assessments. In addition, an \$82,481 Memorandum of Understanding continued with the National Oceanic and Atmospheric Administration, National Buoy Data Center, to equip and operate a real-time weather station on Lake St. Clair to support the connecting channels flow model. In February of 2003, the Michigan SWAP also hosted the 4th Annual Noncommunity Source Water Assessment Training Workshop for Local Health Department staff.

SWAP activities will continue through December 2003 to achieve the goals established by the SDWA.

C. To enhance the State's Wellhead Protection Program through the implementation of matching grant programs.

Efforts to enhance wellhead protection areas of community water supplies embrace two fronts. During FY2003, the WD continued efforts to develop and implement local Wellhead Protection Programs under the existing voluntary state program by administering the sixth round of matching Wellhead Protection Grants. Following is the history of grant awards in this program since its inception:

FY1998	54 communities awarded \$1,010,400
FY1999	62 communities awarded \$1,080,390
FY2000	66 communities awarded \$1,036,000
FY2001	85 communities awarded \$1,281,546
FY2002	84 communities awarded \$1,259,607
FY2003	84 communities awarded \$1,260,180

Total to Date	435 communities awarded \$6,928,123
---------------	-------------------------------------

During FY2003, the WD continued the Clean Michigan Initiative (CMI) Abandoned Well Management (AWM) Grants Program. This is a comprehensive 75 percent state-share grant program to manage abandoned wells identified inside wellhead protection areas of community public water supply sources. The first round of AWM grant contracts funded under the CMI, approved in June 2001, authorized use up to \$1.2 million in CMI funds. The MDEQ had 36 communities participated in the first round of AWM grants. The projects have been successful in locating and plugging abandoned wells.

Projects Status:

- 7 grantees are actively conducting the search component of their AWM projects.
- 1 grantee has suspended work on their AWM grant project due to local funding problems.
- 1 grantee concluded their project at the end of the search phase.
- 12 grantees have completed their search phase and are proceeding with the bidding process to select a contractor to plug the abandoned wells they located.
- 8 grantees are actively plugging abandoned wells at this time.
- 7 grantees have completed their AWM grant projects and have submitted their final project reports.

The WD issued a request for proposals for a second round of AWM grants in 2002, but implementation of the grant award process was delayed until late 2003. The second round projects will be capitalized using up to \$2.4 million in CMI funds, appropriated in 2002. Eleven communities have submitted proposals for the second round.

The WD allocated and spent \$225,000 from the set-aside funds for administration of the AWM Program in FY2003. Administration and coordination of the statewide Abandoned Well Management Program is provided out of the Lansing office of the WD. Staff expenses included one full time equivalent assigned to the Groundwater Section to coordinate AWM Program activities and one full time equivalent working with the associated groundwater data base. The statewide AWM Program is implemented in the field through local health department operations contracts and by WD staff stationed in district offices. Program highlights from FY2003 included:

- Conformance with abandoned well plugging requirements on replacement well sites was estimated to be 80 percent on a statewide basis, based upon the findings from local health department program evaluations.
- The WD conducted training activities for registered well drilling (plugging) contractors and local health departments highlighting new technical procedures for: plugging abandoned flowing artesian wells, plugging abandoned wells terminated in fractured bedrock, and using specialized tools for removing obstructions from abandoned wells.
- Local health departments, with WD oversight, initiated civil enforcement actions involving improper abandoned well plugging methods and/or materials, failure to plug abandoned wells at demolition sites, and improper plugging of abandoned wells by unauthorized persons.
- Two investigations of criminal actions involving purposeful, illegal burial of unplugged or improperly plugged abandoned wells were initiated by the WD in conjunction with the DEQ Office of Criminal Investigations during FY2003.

D. To implement a Technical Assistance Program for small communities.

There are no authorized full time employees for this program. Existing staff in the WD and ESSD/RLOCS will administer it. During FY2003, one community qualified for disadvantaged community set-aside funds. The Village of Boyne Falls received \$5,800 from the Technical Assistance Set-Aside for reimbursement of their planning costs.

In FY1999, the WD developed contract specifications and offered a four-year contract to provide site-specific technical assistance to community and non-transient, noncommunity public water supplies serving a population less than 10,000. The contract underwent a competitive bidding process and was awarded in January 1999. The contractor initiated work and expended \$33,742 in FY1999, \$139,653 in FY2000, \$177,430 in FY2001, \$129,196 in FY2002 and \$219,357 in FY2003. The contract period has been extended until September 2004 with no change in the overall contract amount. To date, over 1,800 on-site visits and over 60 training sessions have been conducted, including 489 site visits and 10 training sessions in FY2003. Public Outreach and Public Information Services have also been performed in this contract to alert very small systems of their responsibilities as public water supplies. Remaining funds in the technical assistance set-aside are available for communities that qualify as disadvantaged communities with a population less than 10,000. These moneys will be used to help defray the cost of planning for projects submitted by the local officials.

During FY2003, several activities were supported with technical assistance funds. Special monitoring for arsenic at small groundwater systems was continued to assist these systems in their planning for the new Arsenic Maximum Contaminant Level. In FY2003, \$6,675 was spent on this monitoring program where the monitoring was primarily performed at non-transient, noncommunity public water systems. In a joint effort of the WD and ESSD, a project was implemented to conduct financial capacity assessments and develop financial action plans for small community public water systems faced with system deficiencies. Several assessments were performed and two financial action plans were completed during FY2003. Based on the favorable response these plans have received thus far, another round of assessments will be scheduled next year. The technical assistance funds used to perform this activity totaled \$4,469 in FY2003.

E. To fund projects identified on the PPL enabling communities to proceed during FY2003 with the construction of facilities included in their adopted project plans.

The DWRF provided low interest financing to 22 projects totaling over \$73 million. The MDEQ and the MMBA committed all available project funds in FY2003.

VI. ESTABLISHMENT OF INTEREST RATES

The primary advantage for Michigan water suppliers is their ability to borrow funds at below market rates. The DWRF interest rate is established prior to each new fiscal year. As identified in Part 54, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, determination of the interest rate is based on demand, market conditions, program costs, and future needs. Since a portion of the state match in any given fiscal year may be financed with State Revenue Match bonds, the upcoming year's interest rate must also account for the expense incurred in securing the bonds.

The DWRF is unique when compared to the SRF, in that both municipal and non-municipal water suppliers may participate if they are qualified. In assessing the market conditions for each type of entity, it was quickly apparent to the MDEQ staff that a municipality would enjoy lower rates of interest on the open credit markets than would a private, non-municipal supplier who would normally have to obtain taxable financing through commercial lending institutions.

Based on the knowledge that market conditions generally demand higher rates of interest for non-municipal borrowers, and considering limitations of having to serve them through a direct, non-leveraged program structure, the director of the MDEQ has

determined that the DWRF will provide similar subsidy rates to both municipal and non-municipal borrowers. The interest rate in FY2003 was 2.5 percent for municipal borrowers, and a 2.5 percentage point buy-down of interest for private water suppliers, although no private water suppliers were on the Project Priority List.

VII. ADVANTAGES OF THE DWRF

Apart from the low interest rate, suppliers also benefit from the DWRF in that they can finance all eligible waterworks system costs. The major benefit results from the fact that water supply financing in the past has always been left to the local units of government or private entities. Historically, there has been no significant state financial assistance available to local officials in meeting water supply needs. The DWRF will provide an on-going source of funding to maintain or improve drinking water quality and public health. In addition, the on-site technical assistance, opportunities for source water assessment and protection, operator training and certification program, and the abandoned well management program provide a blend of direct and indirect aids to local communities across Michigan.

VIII. ALLOCATION OF FUNDS

Allocation of funds among eligible uses is based on a three-step process. First, the MDEQ and the MMBA identify the new sources of funds to be added to the revolving fund and the spending limits for the DWRF within the given fiscal year. Next, a determination of the type and amount of financial assistance necessary for each supplier is made. Finally, funds are allocated among the projects consistent with amounts available and the project's priority standing.

The following identifies the new sources of funds available to the DWRF for FY2003:

FY2003 Title IX Funds	\$32,804,700
FY2003 State Match	<u>\$ 6,560,940</u>
Total	\$39,365,640

In FY2003, Michigan's DWRF requested set-asides for the following (the amounts include federal and state funds):

• DWRF Administration	\$1,574,626
• Small Community Technical Assistance	\$ 674,000
• Source Water Protection	\$ 225,000
• Capacity Development	\$ 450,000
• Operator Certification	\$ 500,000
• Wellhead Protection	\$1,000,000

An application for a capitalization grant resulting from FY2003 federal appropriations was submitted by the MDEQ to the EPA. There is an additional match of \$748,086 in FY2003 from an in-kind contribution credit against the Public Water Supply Supervision program administered by the WD. The in-kind match meets the dollar-for-dollar requirement for source water protection, capacity development, and operator certification. The cash match meets the overall 20 percent program match requirement.

The governor of each state may, at his or her discretion, transfer 33 percent of available moneys between the SRF and the DWRF programs. This may occur starting one year

after a state receives its first capitalization grant for project funds. This option was not exercised during the period covered by this annual report.

IX. EPA AUTOMATED CLEARINGHOUSE ACTIVITIES

As the federal capitalization grants for the set-aside funds were awarded, EPA processed automated clearinghouse requests for increases to the state's draw capabilities. In FY2003, the MDEQ and the MMBA processed \$41,574,957 in actual disbursements. This included \$876,561 in disbursement requests for the MDEQ and the MMBA administrative costs. Non-administrative set-aside requests totaled \$3,187,782.

X. ASSURANCES

The final guidelines from the EPA set forth provisions that the state must give certain assurances in order to qualify for capitalization grant funding. These assurances were incorporated into the Operating Agreement signed by the EPA, the MDEQ, and the MMBA on December 9, 1997. Along with federal and state law, the Operating Agreement serves as the framework by which Michigan's DWRF program operates. The MDEQ and the MMBA have fulfilled the stated assurances throughout the operation of the DWRF during this fiscal year.

Michigan agreed to fair share objectives of three percent for Minority Business Enterprise and five percent for Women's Business Enterprise in FY2003. In its attempt to meet the objectives, Michigan included a reporting requirement as a special condition in all supplemental agreements executed between the loan recipient, the MDEQ and the MMBA. Actual participation rates in FY2003, for Minority Business Enterprise were two percent and for Women's Business Enterprise were ten percent.

XI. SUMMARY

Michigan's DWRF program continues to grow as evidenced by the \$73,285,000 loaned to communities this fiscal year. To date, this is the largest annual loan amount that the DWRF has funded. As MDEQ continues to promote the DWRF program and work with communities to get projects funded, we will continue to provide safe drinking water to the residents of Michigan.